

continued from front

“Florida’s goal and priority for environmental restoration is to lower the phosphorus concentration in water flowing into the Everglades, not only because it’s mandated by law, but because it is the right thing to do.”

– CAROL ANN WEHLE
EXECUTIVE DIRECTOR

amount of phosphorus entering the regional drainage system. How much? On the order of 1,400 tons. That’s a lot of phosphorus!

But it’s still not enough for Everglades health. Constructed wetlands are an equally important part of the story. At present, more than 36,000 acres of land south of Lake Okeechobee have been converted to stormwater treatment areas (STAs). One of them, at almost 17,000 acres, is the largest constructed wetland in the world. And more are being added: 20,000 additional acres of treatment wetlands will be constructed by 2009.

The STAs use “green” technology to remove phosphorus from the water. Wetland plants, such as cattail, southern naiad and algae, take phosphorus into their systems and use it in metabolic life processes. Some is also stored in their stems and leaves. Even after the plants die, sediments in the treatment wetland retain phosphorus from the decaying plant matter. And as a result, outflows from an STA have significantly less phosphorus than inflows.

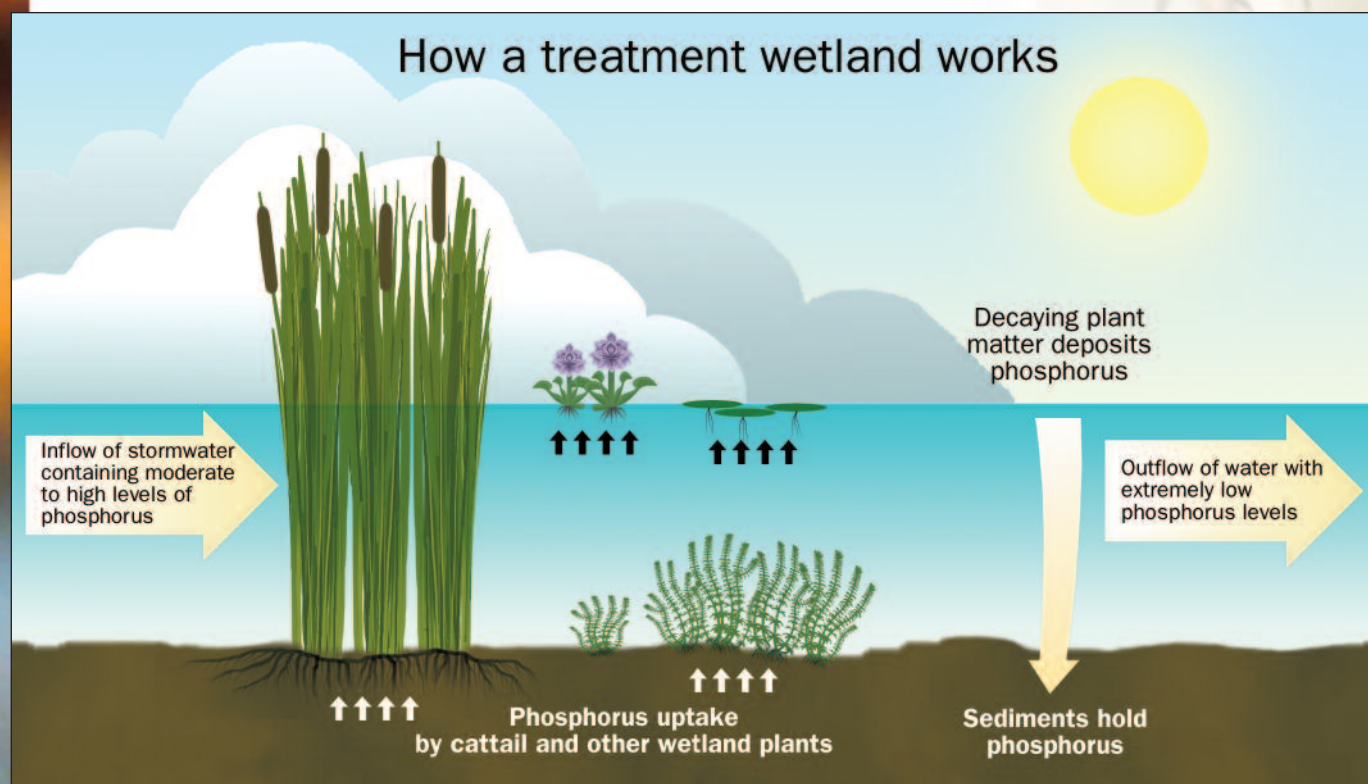
MOST WATER QUALITY GOALS ALREADY MET

Legal requirements have provided the District with interim and long-term targets for phosphorus reduction. At many locations throughout the Everglades, the long-term targets are already being met, even though they are not required until more than a year from now, on December 31, 2006.

In almost all cases, the current interim targets have been met as well. Several setbacks, particularly in the Arthur R. Marshall

Loxahatchee National Wildlife Refuge, have drawn attention, but they are disproportionate to the situation. To put a recent court ruling in context, phosphorus never exceeded the interim levels by more than 2.1 ppb. That’s comparable to two people in a population as large as China’s. And the required levels were met in 55 of the past 60 months, largely as a result of the state’s phosphorus-control programs.

Clearly, we’re getting close, and the problem areas are minimal. That’s a good sign. Thanks to one of the largest ecosystem restoration plans in history, it has become quite safe for the Everglades to take a long, healthy drink.



Purple Gallinule (juvenile)



A Horse is a Horse of Course of Course

Which in practical terms, means there’s a lot to shovel out of the barn each day. Where does it all go?

In South Florida, that’s an important question. Animal waste is a very real source of pollution, because it contains high concentrations of phosphorus. Stormwater runoff carries the phosphorus into drains and canals, ultimately sending it

toward the Everglades where it harms the ecosystem there.

Proper management of animal waste can make an enormous difference in reducing phosphorus impacts. In fact, it already has. Since a program of best management practices (BMPs) was started about a decade ago, it has prevented more than 1,400 tons of phosphorus from entering the Everglades.

What are BMPs? Collectively, they are improved ways of farming, ranching, land-scaping, irrigating and managing animal waste – all with the goal of reducing environmental harm. Examples for equestrians include appropriate fencing that keeps horses away from ponds and canals, pasture rotation that reduces over-grazing and subsequent erosion of phosphorus-laden soils, installation of gutters and downspouts on stables to minimize mud and sediment runoff and of course, manure management. This includes daily cleanout of stalls, proper manure spreading on pastures, use of appropriate spreading equipment and careful manure composting, such as placement away from canals, roads and residences.

A new brochure on equestrian BMPs lists these environmentally sound practices and many more. “Good Horse Sense: Protecting Water Resources” is available by calling (561) 682-2717 or by emailing your request to tvanveen@sfwmd.gov.

Keep in mind that you don’t need to own a whole herd of horses to put BMPs into action. Owners with just one animal can still reduce phosphorus impacts. Will it really make a difference? Of course!

Common Cooter